



Count 1

A coin mechanism for use in an automatic transaction system, the coin mechanism comprising:

coin tubes for storing respective denominations of coins;

a dispenser for dispensing coins from the coin tubes; and

a processor that is coupled to the dispenser

and that is arranged to be coupled to a controller in the automatic transaction system so as to receive dispense signals from the automatic transaction system controller,

wherein the processor is configured to accumulate a value corresponding to the received dispense signals

and to cause at least one coin to be dispensed from the coin tubes based on the accumulated value.

Count 1

U.S. Patent No. 5,733,186 Claim 1

1. In a vending machine..., the improvement comprising: a coin changer including

four coin tubes, each coin tube storing one coin denomination therein

and having coin payout means associated therewith,

the coin changer further including processing means . . . associated therewith, the processing means operably connected to the coin payout means of each coin tube,

the processing means connected to the three coin tube interface lines of the vending machine controller so as to receive signals therefrom, . . .

The preamble of claim1 recites: In a vending machine including a controller..., the controller operable to determine an amount of change... and to produce at least one signal on one of the coin tube interface lines so as to attempt to payout the determined amount of change,...

so that for a given plurality of signals received on three coin tube interface lines, the processing means assigns a value to each signal . . . such that all assigned values are accumulated . . .

and the processing means is operable to effect production of a plurality of signals in attempt to payout coins having respective values which sum to an amount substantially corresponding to the accumulated value...

Claims 2-7 of U.S. Patent No. 5,733,186 depend directly or indirectly from claim 1 and include the limitations of that claim.

Count 1

A coin mechanism for use in an automatic transaction system, the coin mechanism comprising:

coin tubes for storing respective denominations of coins;

a dispenser for dispensing coins from the coin tubes; and

a processor that is coupled to the dispenser

and that is arranged to be coupled to a controller in the automatic transaction system so as to receive dispense signals from the automatic transaction system controller,

wherein the processor is configured to accumulate a value corresponding to the received dispense signals

and to cause at least one coin to be dispensed from the coin tubes based on the accumulated value. See claim 1 above.

U.S. Patent No. 5,733,186 Claim 8

8. A coin changer installable in a vending machine . . . the coin changer comprising:

M coin tubes, each coin tube storing one coin type therein . . .

coin payout means associated with each coin tube,

and processing means operatively connected to each of the coin payout means,

the processing means configured for connection to each of the N coin tube interface lines so as to receive coin payout signals therefrom,

The preamble of claim 8 recites a coin changer "installable in a vending machine which includes a controller... N coin tube interface lines connected to the controller, the controller operable to produce coin payout signals on the N coin tube interface lines...

the processing means operable to accumulate a change payout amount in response to coin payout signals received from the N coin tube interface lines,

the processing means operable in combination with the coin payout means of each coin tube to effect payout of coins therefrom, . . ., wherein, if the accumulated change payout amount is greater than the predetermined amount, the processing means is operable to first attempt to payout coins having respective values, which sum to a predetermined payout amount, and to decrease the accumulated change payout

amount by the predetermined payout amount.
Claims 9-14 of U.S. Patent No. 5,733,186 depend directly or indirectly from claim 8 and include the limitations of that claim. See claim 8 above.
<u>U.S. Patent No. 5,733,186 Claim 15</u>
Claim 15 of U.S. Patent No. 5,733,186 is a method claim corresponding to apparatus claim 1.
15. A method of paying out change from a vending machine including a coin changer, the coin changer including
a plurality of coin tubes each storing one coin denomination therein
and having coin payout means associated therewith,
The method of claim 15 includes steps (b), (c) and (d) that are performed "within the coin changer." A processor is, therefore, inherent within the claimed coin changer.
(a) transmitting a plurality of signals from the controller to the coin changer, The preamble of claim 15 recites A method of paying out change from a
vending machine including a controller and a coin changer associated therewith so as to receive signals therefrom,
(b) assigning, within the coin changer, a value to each of the transmitted signals, (c) accumulating, within the coin changer, the assigned values of the transmitted signals, and

and to cause at least one coin to be dispensed from the coin tubes based on the accumulated value.	(d) producing, within the coin changer, at least one signal which effects payout of at least one coin from one of the plurality of coin tubes.
Count 1	Claims 16 and 17 of U.S. Patent No. 5,733,186 depend directly or indirectly from claim 15 and include the limitations of that claim. See claim 15 above.
Count 1 A coin mechanism for use in an automatic transaction system, the coin mechanism comprising: coin tubes for storing respective	U.S. Patent No. 5,733,186 Claim 19 19. A coin payout mechanism installable in a vending machine, the coin payout mechanism comprising M coin tubes, each coin tube storing
denominations of coins; a dispenser for dispensing coins from the coin tubes; and a processor that is coupled to the	one coin type therein, , coin payout means associated with each coin tube, and processing means operably connected
dispenser and that is arranged to be coupled to a controller in the automatic transaction system so as to receive dispense signals from the automatic transaction system controller,	to each of the coin payout means, the processing means configured for connection to each of the N coin tube interface lines so as to receive signals therefrom,
	The preamble of claim 19 recites that the vending machine controller is connected to the coin tube interface lines: a controller, N coin tube interface lines connected to the controller, the controller operable to produce signals on the N coin tube interface lines,
wherein the processor is configured to accumulate a value corresponding to the received dispense signals	the processing means operable to accumulate a change payout amount in response to signals received from the N coin tube interface lines,
and to cause at least one coin to be dispensed from the coin tubes based on the accumulated value.	and the processing means operable in combination with the coin payout means of each coin tube to effect payout of coins therefrom.